## KANSAS WETLAND AND RIPARIAN RESOURCES: CONSERVATION GOALS AND STRATEGIES

STATE OF KANSAS

May 1993



Wetland & Riparian Areas Project =

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### **FOREWORD**

This document was developed as part of the Kansas Wetland and Riparian Areas Project (WRAP). WRAP is a multiagency coordination effort to address common issues and needs regarding wetland and riparian areas conservation. This project was approved by the Kansas Water Authority and coordinated by the Kansas Water Office. The purpose of this document is to identify goals and strategies for the protection of wetland and riparian resources. This document was created by an interagency WRAP Work Group that is comprised of the following agencies:

Kansas Biological Survey Kansas Board of Agriculture Kansas Dept. of Commerce Kansas Dept. of Health and Environ. Kansas Dept. of Wildlife and Parks Kansas Division of Water Resources

Kansas Water Office

K.S.U., Dept. of Landscape Architecture K.S.U., Dept. of Regional Community Planning

State Conservation Commission State and Extension Forestry U.S. Army Corps of Engineers
U.S. Environmental Protection Agency U.S. Fish and Wildlife Service

U.S. Geological Survey

U.S. Soil Conservation Service

An advisory group comprised of the following special interest organizations provided valuable input throughout the development of this document.

Kansas Assoc. of Conservation Districts Kansas Audubon Council Kansas Chapter, American Planning Assoc. Kansas Society of Architects Kansas Engineering Society Kansas Farm Bureau The Nature Conservancy

League of Kansas Municipalities Kansas Recreation and Parks Assoc. Kansas State Grange Assoc. of Kansas Home Builders Kansas Wildlife Federation

The Work Group attempted to address all concerns raised by the Advisory Group. However, input from the different members of the Advisory Group was diverse and occasionally conflicting. The final wording of this document represents the Work Group's efforts to achieve a balance between conflicting concerns. Unanimous endorsement by the Advisory Group of this document was not attempted.

### **ACKNOWLEDGMENT**

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Equal oppurtunity to participate in and benefit from programs described is available to all individuals without regard to their race, color, religion, national origin or ancestry, sex, age, sexual preference, mental or physical handicap or disability status, or political affiliation.

THIS DOCUMENT WAS PRINTED ON RECYCLED PAPER.

It is the desire of the WRAP Work Group that the recommendations in this document serve as a basis to promote wise stewardship of wetland and riparian resources in Kansas. Much can be accomplished through improved implementation of existing programs. New programs may be needed to fully realize this desire.

### **MISSION STATEMENT**

TO MAINTAIN AND ENHANCE WETLANDS AND RIPARIAN AREAS AND THEIR CONTRIBUTIONS TO OUR SOCIETY AND THE ENVIRONMENT IN HARMONY WITH SOCIO-ECONOMIC CONSIDERATIONS.

Wetland and riparian areas provide many important functions that are of great value to our society. They supply ecological values in habitat for animals and plants, social values in their open spaces that support outdoor recreation and natural esthetics, and important economic values in controlling floods, filtering pollutants, controlling erosion, and producing timber. However, other social and economic benefits can be derived from converting wetland and riparian areas to roads, housing developments, and farmland. Our mission in Kansas is "To maintain and enhance wetlands and riparian areas and their contributions to our society and the environment in harmony with socioeconomic considerations."

The definitions of wetlands and riparian areas used in this document are those defined in the Kansas Water Plan.

WETLAND - "Any area of predominantly hydric soils where standing water or wet soil conditions exists for a significant part of the growing season of most years. When surface water is present, depth generally does not exceed six feet. Vegetation is dominated by water tolerant plants (Hydrophytes)" (Kansas Water Plan; Fish, Wildlife and Recreation Section; Wetland Protection, Subsection; January 1986; Page 4).

RIPARIAN AREAS - "An area of streamside vegetation along any perennial or intermittent stream including the stream bank and adjoining floodplain which is typically distinguishable from upland areas in terms of vegetation, soils or topography" (Kansas Water Plan; Fish, Wildlife and Recreation Section; Riparian Protection Subsection; January 1986; Page 4).

These definitions include many types of wetland and riparian areas, such as floodplain oxbows, rainwater basins, springs, saline or fresh water marshes, and bottomland hardwood forests. These definitions include areas that have been manipulated by human activities, but still exhibit the characteristics of wetland and riparian areas.

The mission statement, goals, and strategies recommended in this document were generated to address many issues identified by the WRAP Work Group and Advisory Group (Appendix). The goals, strategies, and issues are not arranged in priority order. The state and federal agencies with authority and programs to implement the recommended strategies are listed in the "Wetland and Riparian Areas Program Directory Manual" (Kansas Department of Wildlife and Parks and theKansas Water Office 1992).

### GOALS

A) Increase public understanding and awareness of wetland and riparian values and functions, and associated conservation efforts.

The general public is largely unaware of the important values and functions that wetlands and riparian areas provide to our society and the environment. In particular, their value in retarding flood water, trapping sediment and contaminants, and recycling nutrients is frequently ignored. Similarly, the public is often misinformed about various government efforts to conserve wetland and riparian area resources, including efforts to create conservation incentive programs for private property owners. Support from landowners is essential to foster improved stewardship of wetland and riparian areas, because more than 90% of all wetland and riparian areas in Kansas are privately owned.

B) Attain no-net-loss of remaining wetland and riparian resources, considering acreage, function, and values.

Kansas has lost much of its historic wetland and riparian resources. Maintaining those that remain, or replacing them when they must be converted, is essential for establishing a lasting wetland and riparian resource legacy for future generations. A principal concept of a no-net-loss wetland and riparian areas goal is to protect existing resources whenever possible. Where such protection is not possible, the goal should be to minimize and mitigate losses.

C) Maintain diversity of wetland and riparian ecotypes and size classes across the state.

Different kinds of wetlands and riparian areas provide different values and functions. Some wetland and riparian ecotypes, such as marshes or ponds, are often favored by landowners and frequently restored or created. Conservation of other types, such as bottomland hardwood forests and wet meadows, is infrequently considered. Maintaining a diversity of all wetland and riparian ecotypes and size classes across the state should be encouraged to avoid losses of essential values and functions.

D) Increase quantity and quality of high priority wetland and riparian ecotypes.

Financial resources available to conserve wetland and riparian resources are limited. Conservation efforts need to target high priority areas for protection and restoration. Restoration priority should be determined by objective criteria that considers scarcity, functions and values of particular wetland and riparian ecotypes.

E) Optimize sustainable and multipurpose uses of wetland and riparian areas.

Wetlands and riparian areas in Kansas are important component of the state's varied environmental, social, and economic resources. These areas have significant benefits in retaining floodwater, improving water quality, recharging aquifers, providing wildlife habitat, supporting recreation, and many other uses. In general, the focus on wetland and riparian areas conservation should be broad and not be restricted to only a few of these important benefits.

F) Improve coordination and cooperation among federal, state, local and private entities responsible for wetland and riparian stewardship.

Responsibilities for conserving wetland and riparian areas in Kansas are shared by a multitude of state and federal agencies. City and county agencies also are responsible for managing these habitats. In addition, many private organizations play an active role in conserving wetland and riparian areas. This diversity of interests, authority, and bureaucracy can create complication and confusion among agencies and the public. Efforts are needed to integrate program objectives and coordinate conservation strategies. More emphasis should be placed on citizen involvement in wetland and riparian issues.

Balance public benefits supplied by wetland and riparian resources with the rights of private property owners.

Private property owners have the right to conduct activities and use wetlands and riparian areas in a manner that is compatible with public needs. Landowners are compensated if their property is taken for a public purpose. Private property rights ensure that land owners maintain the ability to control access, derive economic benefits, and perform other activities on their land. However, government has the authority to restrict some actions on private lands that interfere with neighboring land owners rights or adversely affects the health, safety and welfare of the general public. These principles must be taken into account in formulating wetland and riparian protection policies.

H) Enhance scientific knowledge of wetland and riparian values, functions and management.

The very foundation of wetland and riparian areas conservation is constructed from a sound understanding of the functions and values they possess. This foundation must be made as firm as possible by supporting necessary research and critically evaluating our knowledge.

 Implement a statewide inventory system to identify, monitor, and evaluate the status and trends of existing wetland and riparian areas.

Conservation and development interests are often hampered by incomplete information about the location of existing wetland and riparian areas. A complete statewide inventory would help alleviate confusion and be a useful planning tool. Such an inventory will require consistency in definitions of wetland and riparian areas to achieve credible delineations. The system developed should utilize a multiagency approach and have broad acceptability. Wetland and riparian areas are dynamic resources. An inventory needs to be a continual process and not a one-time event.

### **STRATEGIES**

- A. INFORMATION/EDUCATION
- Al. Develop a statewide information network to disseminate information through a variety of media about wetland and riparian resources.

A state repository and distribution network should be established to facilitate utilization of information regarding wetland and riparian areas. The repository should include written and audio/visual information. Coordinated interagency workshops could be produced though the network. A listing of experts could be available to give presentations to organized groups. Information should include wetland and riparian values and functions, identification, assistance programs, and regulatory programs. Personnel from agencies and private organizations that distribute this information should be trained and provide up-to-date information.

A2. Plan and implement demonstration projects for management practices on wetland and riparian areas.

Demonstration projects should be conducted to provide useful information to landowners on the "how to" of wetland and riparian area management. Public lands provide an excellent opportunity for state and local agencies and organizations to demonstrate these practices. Demonstration projects on the private lands of willing landowners would be valuable.

A3. Develop programs that target specific groups and provide educational opportunities on wetland and riparian values and functions.

Specific programs can be targeted to various population classes such as urban residents, rural landowners, or youth groups. The purpose of these programs should be to educate and promote resource conservation activities.

A4. Compile wetland and riparian resource information to facilitate management and conservation decision-making.

Information such as location and condition of these resources is needed to facilitate proper planning and management at the state and local level. These efforts must be conducted in a systematic process with established definitions, rating and evaluating criteria, data collection and mapping standards. Wetland and riparian resource information should be integrated into the state geographic information systems program to facilitate use of these databases with other natural resources information. A periodic reporting system should be established to monitor the activities of state and federal programs to determine status and trends and to evaluate effectiveness.

### B. TECHNICAL ASSISTANCE

B1. Provide coordinated technical assistance to private landowners.

Landowners have a vast variety of government agencies available for technical assistance on wetland and riparian issues. However, expertise and experience regarding specific conservation practices or techniques can vary immensely among these same agencies. Greater effort is needed to increase the knowledge and understanding of wetland and riparian conservation practices among all technical support organizations. A referral system that links landowners with technical assistance is needed.

## C. FINANCIAL ASSISTANCE/INCENTIVES

C1. Provide financial assistance (cost-share) to private and public landowners for protecting, restoring, or enhancing wetlands or riparian areas.

Encourage state and federal program administrators to incorporate wetland and riparian best management practices (BMP's) into existing financial assistance programs. Also, encourage local entities responsible for implementation of financial assistance programs to make wetland and riparian BMP's available for assistance to landowners. Where existing programs are inadequate for protecting wetlands and riparian areas, programs need to be modified, enhanced, or developed.

C2. Explore the whole range of incentives for wetland and riparian protection and management beyond direct financial assistance to landowners.

Additional incentives should be sought and developed to protect and restore riparian and wetland areas. Examples of such incentives could include but not be limited to: local-tax abatements, use of areas for commercial-recreation purposes and landowner-recognition programs.

PLANNING AND COORDINATION

Work cooperatively with federal agencies to improve effectiveness of D. D1. federal wetland regulatory programs.

Federal wetland regulatory programs should operate at optimal levels in the State of Kansas. State agencies should coordinate with and provide input to appropriate federal agencies regarding the administration of federal wetland regulations.

Enhance interagency policy dialogue on wetland and riparian issues and D2. statewide coordination.

Agencies and entities with an interest in wetland and riparian area issues should continue to communicate in a formal environment (e.g. WRAP Technical, Work, and Advisory groups) regarding wetland and riparian area projects, programs and concerns.

Support and encourage local planning efforts affecting wetland and D3. riparian areas.

Appropriate agencies should assist local entities in natural resource and developmental planning efforts affecting wetland and riparian areas. Those planning efforts could include but are not limited to: Riparian and Wetland Protection Program plans, watershed district general plans and specific site plans, P.L. 566 Program plans, commercial and residential plans and other local planning activities.

INVENTORY / MONITORING Ε.

Complete a statewide wetland and riparian areas inventory. E1.

Several federal efforts are currently underway to complete a statewide inventory of wetland and riparian areas. Examples include the U.S. Fish and Wildlife Service's National Wetland Inventory and the Soil Conservation Service's wetland (swampbuster) determinations. The efforts need to be better coordinated and strive to achieve a consistent inventory that is compatible with the various purposes. The inventory should rely on common definitions and be developed in an interagency fashion. Such an inventory should be integrated into a statewide Geographical Information System to provide equal access to available information.

Develop criteria to identify high priority wetlands and riparian areas. E2.

Objective criteria are needed to identify and target high-priority wetland and riparian areas. Given the limited financial resources available to protect, restore, and enhance wetland and riparian areas, targeting of efforts becomes a practical reality. Criteria should consider scarcity, threats, functions, and values of wetland and riparian resources. Criteria should rely on quantitative data, be compatible with existing national criteria, and applicable at state, regional, and local levels.

E3. Establish a periodic reporting system to determine status and trend of wetland and riparian resources and to evaluate program effectiveness.

Every planned management system needs to have a way to measure success. This is equally true in program efforts to protect, restore and enhance wetland and riparian resources. The status and trend of these resources in the state should be tracked periodically and compared against program inputs of time and money to make adjustments to improve program effectiveness.

### F. ACQUISITION / MANAGEMENT

F1. Acquire high-priority wetland and riparian areas in fee-title or easement from willing sellers.

Public ownership of wetland and riparian areas in Kansas is extremely limited. Many areas could and should be purchased from willing sellers and managed to optimize functions and values. Other areas may be more appropriately protected through easements donated or purchased from willing sellers. Such easements protect public values and functions of wetland and riparian areas while maintaining some private-property rights and control. Several new programs, most notably the federal Wetland Reserve Program and State Riparian and Wetland Conservation Easement Program are available to acquire easements.

F2. Establish water rights necessary to maintain high quality wetland and riparian areas.

Many public or privately owned wetland and riparian areas lack rights to surface or ground water needed to maintain their functions and values as wetland or riparian areas. Such rights should be appropriated or purchased from willing sellers under established water law. They should have a measurable effect on maintaining or restoring wetland and riparian areas.

F3. Enhance and restore wetland and riparian areas on public lands and manage them to their fullest function and value.

Some opportunities exist to enhance and restore wetland and riparian areas on public lands. Such restoration projects offer opportunity to experiment with new techniques and to demonstrate successful practices to landowners and the general public. Management of wetland and riparian areas on public land offers unique opportunity to focus on specialized functions and values, such as endangered species conservation, education, or public recreation.

### G. REGULATION

G1. Emphasize protection of natural wetland and riparian resources impacted by water development projects through the Water Projects Environmental Coordination Act.

The Water Projects Environmental Coordination Act (ECA) is an existing state law that requires certain water development projects, which require state approval from the Division of Water Resources, be subject to review by state environmental review agencies for potential adverse impacts. The Chief Engineer, Division of Water Resources, has limited authority to condition permits or approvals to address identified environmental concerns. The adequacy of current ECA administrative guidelines and agency regulations for protecting wetland and riparian resources under existing statutory authority should be evaluated.

G2. Consider impacts to wetland and riparian resources in the administration and enforcement of the Water Appropriation Act.

Water rights that impact wetland and riparian resources, including Minimum Desirable Streamflows, should be strictly administered in accordance with the law to protect natural wetlands and riparian areas from water depletion. In addition, careful consideration should be given to the potential adverse impacts of proposed water withdrawals on natural wetland and riparian resources before future water rights are granted.

G3. Incorporate wetland and riparian concerns into state water quality standards.

State Water Quality Standards should address wetland and riparian resources. This includes establishment of minimum-water-quality standards for these areas and requirements for appropriate best management practices where water quality violations exist.

G4. Incorporate the conservation of valuable wetland and riparian areas into local comprehensive land-use plans and utilize existing planning and zoning regulatory measures, as appropriate, to implement the plan.

Local governments through public processes have authority to develop and implement sound land-use plans for their communities. Conservation of valuable wetland and riparian resources should be recognized and addressed in this process. Current statutes provide local governments various regulatory tools that administer land-use plans. These regulatory tools should be considered and utilized when appropriate, along with other non-regulatory measures, to conserve valuable wetland and riparian resources.

### H. RESEARCH

H1. Promote the funding of research projects that address wetland and riparian issues specific to Kansas and evaluate the design and effectiveness of best-management practices.

Various state and federal research programs exist that could be utilized to fund research projects involving wetland and riparian resources. Program resources need to be directed toward research involving wetland and riparian issues. Additional information is needed regarding specific values and functions of these resources in Kansas. Information is also needed on the design and effectiveness of various management practices including protection, enhancement, and restoration techniques.

H2. Assess current attitudes and public demand for wetland and riparian conservation.

Information is needed better quantify the public's attitudes toward the conservation of wetland and riparian areas. Assessment is also needed about the public's knowledge of the functions and values of wetlands and riparian areas. Resource demands and use (e.g., preservation, recreation, etc.) should be assessed on a regional basis. This information would help develop and target various programs to areas of needs.

Issues identified by the WRAP Work Group and Advisory group. These issues are not listed in priority order.

- Wetlands and riparian areas are being lost or degraded. Kansas has lost a substantial percentage of its historic wetland acreage. a.
- Public understanding of wetland and riparian values and conservation b. programs is inadequate.
- Wetland and riparian management techniques are not well developed, C. understood, or applied.
- Land owners have limited incentives to protect and enhance wetland and d. riparian areas on private lands.
- Conservation and development interests alike are hampered because no statewide comprehensive wetland or riparian inventory exists. e.
- Coordination of wetland and riparian conservation among water-related f. agencies, local governments, and private citizens is inadequate.
- Landowners want compensation for loss of economic use of their lands. g.
- Public access and recreational opportunities associated with wetland and h. riparian areas are limited.
- Public ownership of wetland and riparian areas is limited. i.
- Dewatering of rivers, streams, and aquifers threatens existing wetland j. and riparian areas.
- Loss of wetland and riparian areas causes a decline in water quality, k. due to an increase in nonpoint source pollution.
- Regulations that address wetland and riparian areas conservation are 1. limited.
- Private property rights are not well defined or openly considered by m. regulatory programs.
- Relative value of different wetland and riparian types is not well n. understood.
- Social and economic benefit/cost of wetland and riparian areas 0. conversion are not well documented.
- Information regarding the functions and values of wetlands and riparian p. areas is incomplete.
- New conservation programs may contradict established programs that are Q. well accepted by landowners.